Introducing PA-X: A new peace agreement database and dataset

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Abstract

This article introduces PA-X, a peace agreement database designed to improve understanding of negotiated pathways out of conflict. PA-X enables scholars, mediators, conflict parties and civil society actors to systematically compare how peace and transition processes formalize negotiated commitments in an attempt to move towards peace. PA-X provides an archive and comprehensive census of peace agreements using a broad definition to capture agreements at all phases of peace processes in both intrastate and interstate conflict, from 1990 to 2016. These comprise ceasefire, pre-negotiation, substantive (partial and comprehensive), and implementation agreements, disaggregated by country/entity, region, conflict type, agreement type and stage of agreement totalling over 1,500 agreements in more than 140 peace and transition processes. PA-X provides the full text of agreements, and qualitative and quantitative coding of 225 categories relating to politics, law, security, development and implementation. Data can be aggregated or merged with conflict datasets, effectively providing many datasets within one database. PA-X supports new comparative research on peace agreements, but also on peace processes – enabling tracing of how actors and issues change over time – to inform understandings of conflict termination. We illustrate PA-X applications by showing that an intricate peace process history correlates with reduced likelihood of conflict recurrence, and that cumulative provisions addressing elections see the quality of subsequent post-conflict elections improve.

Keywords

conflict, database, dataset, peace agreements, peace process

Introduction

Since the end of the Cold War, negotiated ends to conflict have been a key modality for addressing violent conflict (Doyle & Sambanis, 2000; Fortna, 2004; Kreutz, 2010). While informal commitments to peace are important, formal legalized public agreements help resolve the inability of warring sides to credibly commit (Hartzell & Hoddie, 2003; Walter, 1997, 2002). An agreement's use of legalized language, its legal status, public availability and formality, can increase the reputational risks associated with breach; precision of drafting can bring clarity, making breach easier to identify and address; and provision for third-party monitoring can provide external enforcement (Abbott, Keohane &

Moravcsik, 2000; Bell, 2006). For these reasons, research is burgeoning on how peace agreements address conflict issues (Ansorg, Haass & Strasheim, 2016; Binningsbø & Rustad, 2012; Matanock, 2017; Joshi, Melander & Quinn, 2017; Martin, 2013; Mattes & Savun, 2009; Ottman & Vüllers, 2015).

However, the field has lacked a comprehensive dataset for investigating peace agreements on their own terms as tools for mediating ends to diverse types of conflict (de Waal, 2017). We have had no systematic global data on when and how peace and transition processes produce

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agreement; how process-sequencing addresses different constituencies and interests over time; how pathway dependencies derive from early agreements; how iterative agreements emerge from past failures; or how wider international agreement underwrites intrastate agreement. PA-X Peace Agreements Database aims to fill this gap.

Introducing PA-X

PA-X is a repository of peace agreements from 1 January 1990, current up until 1 January 2016, with full quantitative and qualitative (relevant extract of the peace agreement) substantive coding.[1] It currently contains 1,518 peace agreements for the period, in 146 peace processes, with content coded for 225 substantive categories. It includes the full text of all agreements.

PA-X uses these definitions:

Peace agreement: formal, publicly available documents, produced after discussion with conflict protagonists and mutually agreed to by some or all of them, addressing conflict with a view to ending it.[2]

Conflict's protagonists: state actors and non-state actors who are involved in violent conflict, or their associated political representatives.

Conflict: armed or military violence, causing more than 25 conflict-related deaths in one year.

Peace or transition process: a formal attempt to bring political and/or military protagonists of conflict to some sort of mutual agreement as to how to end the conflict.

Crucially, unlike existing peace agreement datasets, PA-X definitions deliberately avoid linking the question of whether something *is* a peace agreement to a pre-defined concept of what the peace agreement tries to resolve. A theoretical conceptualization of the task of conflict resolution informs this approach. Conflict includes both the conflict itself and also a meta-conflict: 'the conflict as to what the conflict is about' – both needing resolution (McGarry & O'Leary, 1995). As a result, peace agreements often avoid or redefine the incompatibility stated by the main armed actors, to address deeper root causes which precipitated the onset of armed conflict (e.g. the denial of equality and minority rights that preceded separatist claims in Sri Lanka and Northern Ireland), or any new grievances that emerged from conflict itself.

Existing datasets

The neutrality of PA-X's definition with respect to who or what agreements include contrasts with the only existing dataset with a form of comprehensive coverage of peace agreements, the Peace Agreement Dataset (PA_D) of the Uppsala Conflict Data Program (UCDP), which also is the basis of key issue-specific datasets (Harbom, Högbladh & Wallensteen, 2006; Högbladh, 2012). PA_D includes only peace agreements 'which are signed by at least two opposing primary warring parties [in an armed conflict] and concern the incompatibility [between them]: in effect solving, regulating or outlining a process for how to solve it' (Högbladh, 2012). 'Incompatibility' refers to UCDP's definition of armed conflict as 'a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in one calendar year' (UCDP, 2018: 1; Pettersson & Eck, 2018). PA_D should be understood as usefully complementing and completing UCDP conflict data by showing when and how the main parties to conflict move towards resolving their stated incompatibility. This is quite different from providing a dataset for understanding when and how peace agreements and peace processes are used to address violent conflict.

The Peace Agreement Matrix (PAM), developed by the Kroc Institute for International Peace Studies, is the only other dataset involving a clear universe of peace agreements: in this case, the 34 peace agreements understood to be comprehensive. PAM provides qualitative and quantitative data regarding how their key stipulations are implemented over a ten-year period (Joshi, Quinn & Regan, 2015; PAM, 2015). It therefore does not seek to provide an overview of peace agreement practice, but to provide a valuable comparison of how comprehensive peace agreements are implemented.

PA-X is inclusive of all agreements in these datasets, with the exception of 19 PA_D peace agreements coded on the basis of secondary sources.[3] However, PA-X is broader in a number of ways. Agreements are included regardless of whether they addressed the incompatibility stated by the parties, including those establishing the

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[1] Bell et al (2018), PA-X available at www.peaceagreements.org.

[2] PA-X uses a 50-year cut-off between the conflict's end and the peace agreement, as in interstate conflict there are often long gaps between the de facto end of the conflict and its formal end in an agreement.

[3] PA-X only includes agreements for which a primary source exists: our research indicates that secondary accounts focus on key provisions and are not suitable for coding; additionally, reports make mistakes or are casual in naming and dating resulting in duplication. PA-X research indicates up to 114 further agreements may exist with no published public text even in local languages.

negotiation process and those implementing earlier agreements. The definition includes agreements involving the main parties to the main conflict, but also those involving smaller violent actors in residual or localized conflicts who may be critical to nationwide peace (Autessere, 2010). The resulting PA-X collection of peace agreements is much larger than PA_D's 186 agreements and PAM's 33 agreements for the same period. Database search mechanisms on conflict nature and type, agreement status and stage make narrower definitions customizable.

PA-X selects agreements over a wider range of conflicts and transitions than these datasets. It retains a concept of armed conflict with the 25-deaths threshold to avoid collapsing the definition of a peace agreement to more diffuse forms of conflict and political agreement of any society. However, PA-X understands peace agreements to also respond to 'new wars', involving unstructured groups with mixed criminal, personal and political motives, who may never clearly state their goals (Kaldor, 2013).[4] In its breadth of definition and resultant agreement collection, PA-X captures the larger peace agreement practice evidenced by various online libraries of peace agreements, which point to alternative frames for comparison of non-linear, complex multiparty peace agreement trails (United States Institute of Peace, peace agreements digital collection (USIP, 2018); Transitional Justice Peace Agreement Database (TJI, 2018); UN Peacemaker (2018) and associated Language of Peace tool (2018)). Unlike these collections, PA-X attempts to create a defined, bounded quantitative and qualitative dataset.

While existing datasets view peace agreements and provisions as independent variables to conflict, PA-X enables them also to be understood as dependent variables: shaped by conflict types, locations, dynamics, constellations of actors and agendas for change. PA-X's peace agreements provide windows into how armed conflict between key groups is resolved as part of a complex mutating conflict system, often nested within other regional and global conflict systems (Gebrewold, 2009). Violence is sustained by constituencies and interests beyond the immediate armed actors, while nonviolent groups often press for wider root causes to be addressed. From this perspective, peace agreements are not just important as a set of discrete commitments by armed actors but play conflict resolution coordination roles between and among: the parties to the conflict; the wider social groups necessary to reconciliation and reconstruction; and international interveners (cf. Galligan & Versteeg, 2013). PA-X provides data for understanding this coordination function, making three key contributions as we now consider.

A comprehensive census of peace agreements

First, PA-X provides a comprehensive census of peace agreements in a field in which the possible universe of agreements has remained curiously unexplored. This endeavour itself has involved a major conceptual and research undertaking running continuously from 1995 to date. Earlier static versions (Bell, 2000, 2008) and a searchable legal database first published in 2010 (TJI, 2018) enabled scrutiny and debate over what constituted a 'peace agreement', and provided a universe of possible cases for existing peace agreement datasets (and also UN Peacemaker, 2018), whose development in turn informed PA-X. Given that neither of the existing datasets is fully up to date (PA_D to 2011, PAM to 2012), the provision of a census remains important to ongoing development of datasets, as were PA-X's earlier list-incarnations.

Agreements in PA-X were sourced, often contemporaneously, using literature on individual peace processes, interviews with actors and mediators and country experts, existing agreement collections, country-specific websites, civic group websites, international organizations' official documentation, court judgements, requests to governments and non-state actors who have signed peace agreements, or to mediators and lawyers involved in conflicts, and tracing agreements mentioned in other agreements.

The PA-X definition seeks to keep the census accurate in the face of the peculiarities of peace agreement form, in ways that the other datasets struggle with. Agreements often involve complex signatory choreographies between armed groups and political representatives, because nonstate actors cannot sign legally binding documents, and/or it is politically unacceptable for them to sign. Peace agreement form is often just as contentious as substance (Bell, 2006). PA-X definitions therefore understand peace agreements to be reached by armed actors in the negotiations, even if not meeting face to face or signing the eventual agreement (both allowed by PAM but not by PA_D).

To illustrate, the General Framework Agreement on Peace in Bosnia and Herzegovina 1995 (Dayton Peace

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[4] Agreements were included based on UCDP's newer datasets on one-sided violence and intragroup conflict. In addition, 20 instances of conflict were identified that could not be related to any UCDP armed conflict or violence data, but agreements were included on the basis of clear evidence of the requisite deaths in conflict found in official research and media sources. See Online appendix for lists.
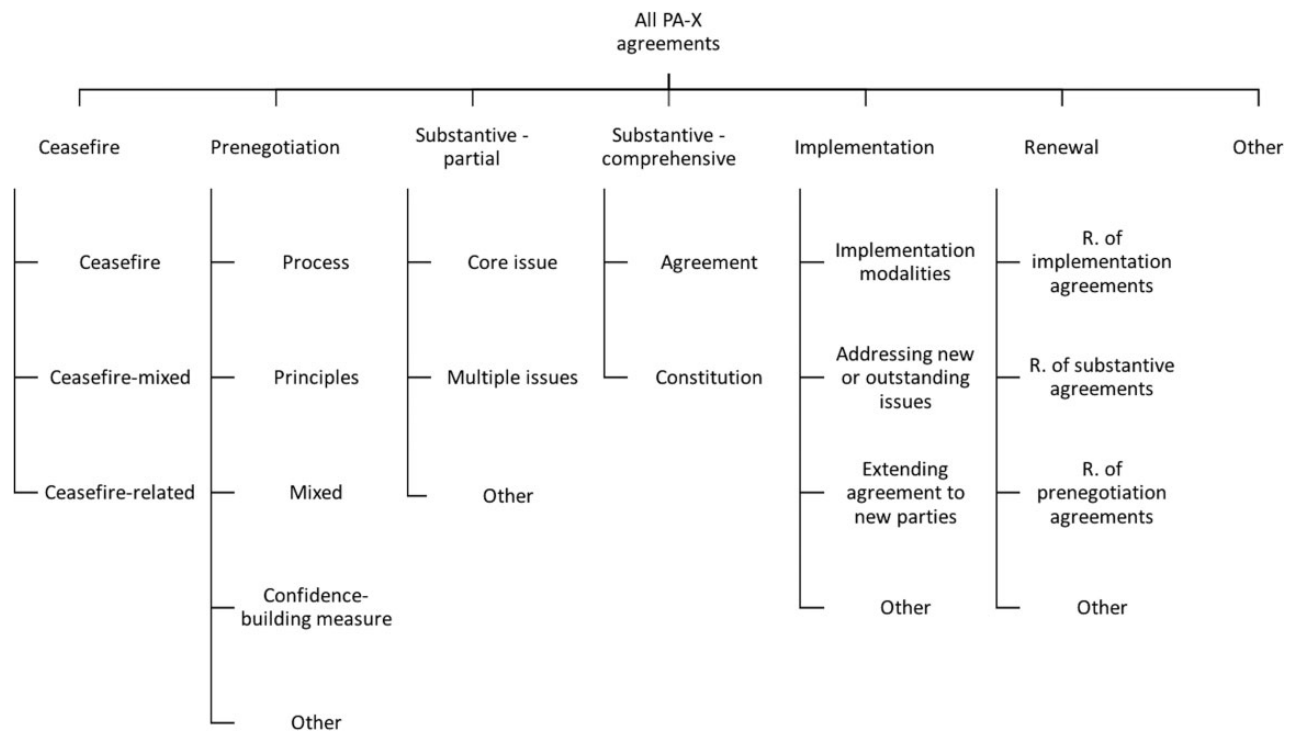
Figure 1. PA-X stage categorization

Agreement, hereinafter DPA), included by PA_D, PAM and PA-X, was deliberately designed (contra PA_D and PAM) to *prevent* one of the primary warring parties from negotiating, signing or publicly agreeing it: Bosnian Serb political and military leaders, Karadžić and Mladić, were excluded due to their indictment for war crimes by the International Criminal Tribunal on Former Yugoslavia. Its structure – a short main agreement and 12 annexes (one of which is a constitution), all with different signatory arrangements, reflected a desire that the DPA be a binding legal treaty – something that required that only state parties signed the main agreement (Bell, 2006).

PA-X agreements nonetheless can be related to existing conflict and peace agreement data. Each document is linked to a country location of conflict (or locations for interstate agreements), allowing for PA-X data to be supplemented by country-level data based on the Gleditsch & Ward (1999) country codes and ISO nomenclature. Whenever possible, we have linked peace agreements to the conflicts they refer to in the PRIO/UCDP and Correlates of War (COW, 2018) datasets.[5] While, like PA_D or PAM,

the key unit of PA-X data is the peace agreement, agreements are also assigned to a peace/transition process. Secondary sources on the conflict and peace process (see particularly Escola de Cultura de Pau, 2018) were used alongside country expert advice to identify and label peace processes.

Linking peace agreements to conflicts and peace processes enables researchers to aggregate data and consider these aggregates as documentary trails of conflicts and the related efforts to end them, enabling various units of analysis to be considered: individual agreements, peace processes, or conflicts.

Multiple new datasets in one
The second contribution of PA-X is to provide multiple new datasets in one. PA-X divides agreements into the stages and substages shown in Figure 1, which can be used to create separate (sub)datasets. The frequency for each stage is shown in Figure 2.

PA-X provides the first major dataset of ceasefires, comprising 267 agreements, such as the Joint Understanding for a Humanitarian Pause, between the Government of Indonesia and the Free Aceh Movement (GAM), 2000. It also provides 165 ceasefire provisions within other peace agreements. Bosnia, for example, indicates a surprising 68 agreements providing for

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[5] Clearly no UCDP conflict ID exists for the PA-X documents (95 in total) not related to UCDP armed conflict but classified as peace agreements on the basis explained in fn3.
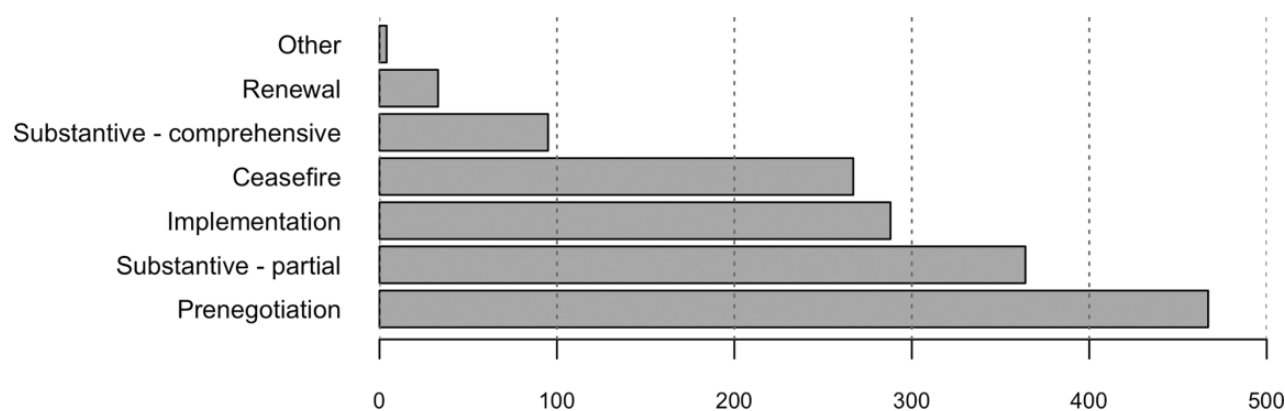
Figure 2. PA-X agreements by stage

ceasefires, 37 of which were stand-alone, many local in application.

As regards framework/substantive agreements, PA-X includes partial agreements that deal with a core confidence-building issue or put in place a transition in ways that leave them outwith PA_D's definition, for example, the 12-Point Understanding between the Seven Political Parties and Nepal Communist Party (Maoists), 2005. PA-X comprehensive agreements include all the documents in other datasets, for example, the DPA, the Multiparty Agreement in Northern Ireland (Belfast or Good Friday Agreement), 1998, and Sudan's Comprehensive Peace Agreement (CPA), 2005. However, PA-X data show that one-third of the peace processes have seen comprehensive agreements follow an earlier comprehensive agreement. Implementation agreements in PA-X include agreements such as the Dispositions Pratiques Additives, 2006 in Democratic Republic of Congo, modifying a 2006 accord. PA-X finds 53 peace processes containing 86 comprehensive peace agreements, each initial comprehensive agreement being followed by more than six agreements on average: in total 14 implementation agreements extending existing arrangements to new parties, and 91 extending them to new issues.

PA-X agreement categorization enables examination of global agreement patterns, but also provides capacity for longitudinal study of the complexity of peace processes within particular countries, as basic timelines for four countries illustrate in Figure 3 (for more detailed versions see online visualizations[6]).

The database enables consideration of agreement construction in multilevel conflicts. It separately categorizes peace agreements according to their nature and the nature of the conflict, again creating effectively three connected subdatasets (Figure 4).

Interstate agreements relating to interstate conflict: agreements between two or more states addressing conflict between two or more states (such as the ceasefire and later Algiers Agreement of 2000, ending conflict between Ethiopia and Eritrea).

Intrastate agreements relating to intrastate conflict: agreements signed or agreed to by key protagonists of conflict within states (and sometimes also with external actors), relating to conflict arising mainly within a state's borders, comprising the main body of PA-X.

Interstate agreements relating to intrastate conflict: agreements between two or more states *only* (if no other internal state parties), relating to conflict arising mainly within a state's border, such as the British–Irish Agreements which underpinned the Northern Irish peace process at various moments.

This last category speaks to complex historical relationships between interstate conflict and intrastate conflict, and the conceptualization of these agreements as distinctively related to both types of conflict offers a distinct dataset with new avenues of research.

A new ontology of peace agreement provisions
Coding peace agreement provisions requires development of an ontology of what is important and no one ontology is a given (Elkins et al., 2014). PA_D and PAM code for 38 and 51 issues which are understood as in some sense 'key' (PA_D providing quantitative coding

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[6] Burundi https://goo.gl/pa11E1 and Yemen https://goo.gl/QHCH1V, Northwestern University's Knight Lab Timeline Tool.
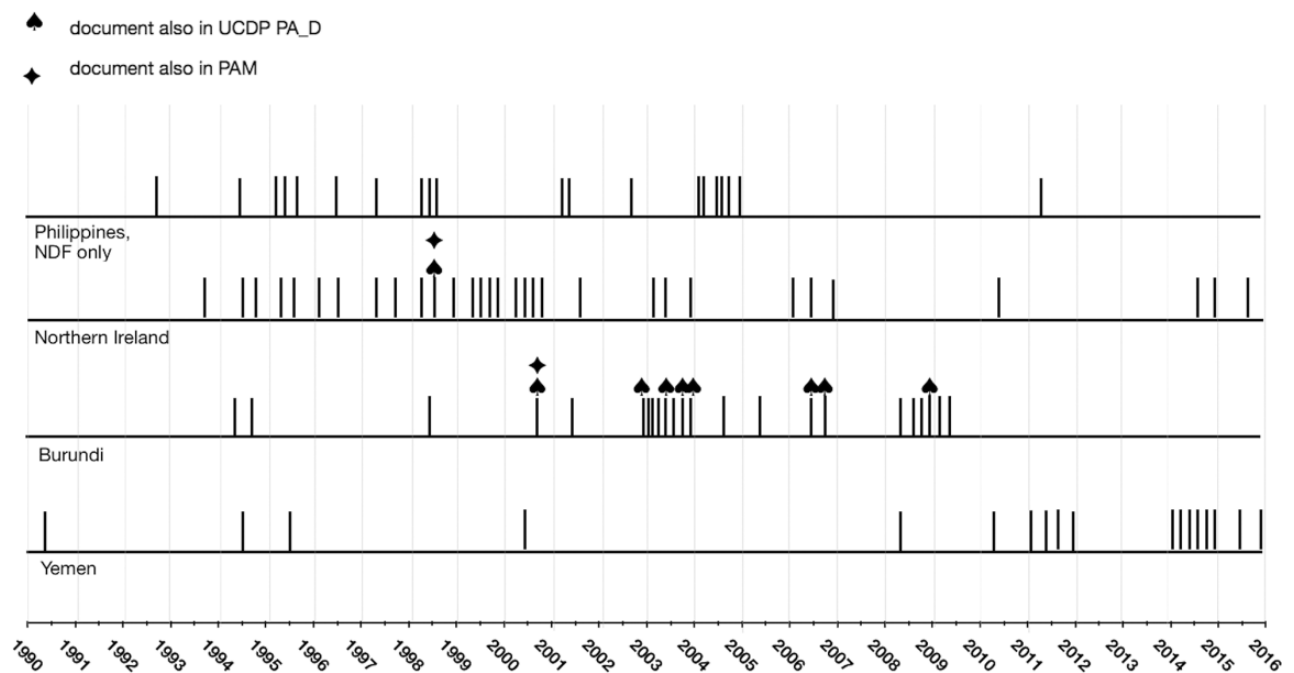
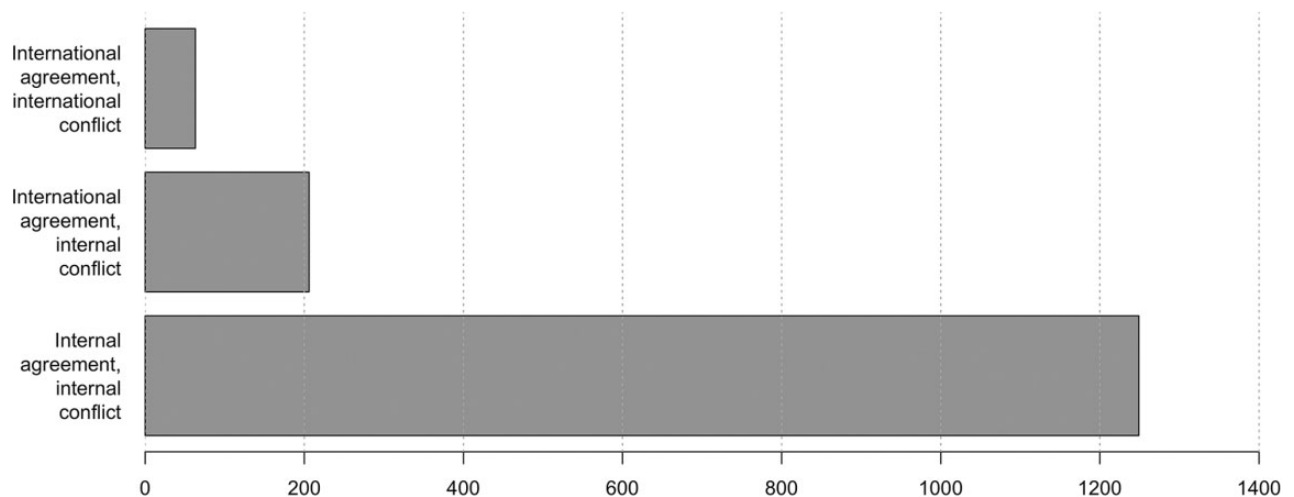Figure 3. Sample PA-X agreement/process timelines

Figure 4. PA-X agreements by conflict/agreement type

only). Language of Peace uses a more inductive approach to the ontology of peace agreement texts and drafts, grouping and tagging provisions of similar types to create 243 issues (qualitative capacity only).

PA-X offers a significant new ontology that flows from understanding peace agreements to simultaneously institutionalize three distinct projects of conflict resolution: first, providing a quasi-contract between the parties on how to end the violence; second, providing a quasi-constitutional framework to restore the relationship between the government and 'the people'; and third, providing a road map for reconstruction and development to also guide international interveners. PA-X coding reflects a research interest in how peace processes navigate among these different projects of inclusion to accommodate groups with often-incompatible agendas

for change. It provides a basis for mapping how these relationships and agendas are addressed and re-shaped across a peace process, as one or other of the peace agreement projects comes to the fore, or into tension with each other.

PA-X's ontology focuses on provisions dealing with the nature of the state; its governance; inclusion of different groups; human rights and equality; justice sector reform; socio-economic reconstruction; land, property, environmental issues; security sector reform; transitional justice; and implementation. Categories were developed within these themes by combining the above conceptualization of agreement function with: detailed review of academic literature; academic engagement with research communities; long-term engagement with mediators and parties to conflict across the globe; consultation with policy end-users such as foreign offices and UN agencies; and an element of inductive response to agreement content. For example, transitional justice includes the categories: amnesty/pardon, courts, past-focused mechanism, prisoner release, vetting, missing persons, reparations and reconciliation. Power-sharing includes political, territorial, economic and military power-sharing (Hartzell & Hoddie, 2003), with further breakdown for more finely grained analysis, for example of political power-sharing into the Lijphartian categories of executive coalition, proportionality in legislature, mutual veto, segmental autonomy (Lijphart, 1969) and a 'plus' of international involvement (O'Leary, 1998).[7]

This ontology produced 225 categories which can be combined with other search options to provide more than 30,000 unique data points. Free word searches are also enabled. In each case, the full text of the relevant provision is provided along with quantitative coding. To enable researchers to differentiate between rhetorical mentions of issues and more robust commitments to action, a weighting of 1–3 was applied to the coding of key categories: 1 for mere mentions, 3 for clear, detailed, goal-oriented provisions indicating a commitment to implement, and 2 for provisions that are goal-oriented but with little detail or vice versa. The term 'reconciliation', for example, is more frequent than any of the other transitional justice categories (referenced in 426 agreements), but only 85 references are substantive rather than rhetorical.

Coding verification was extensive, using multiple methods as recommended by Salehyan (2015), drawing also on Constitute's innovations with similar data (Constitute, 2018). Key agreements were double-blind coded, and the entire database was checked using word searches of agreement texts for amenable categories. Errors identified were remedied, but also used to identify systemic reliability problems, namely: individual coder weakness, inaccuracy in long agreements, and inconsistency in resolving 'borderline' coding decisions. These systemic problems were then addressed through coder training, definitional clarification and consistent adjudication of decisions on borderlines enabled by designing a 'back-end' question system to enable one overarching decisionmaker and automatic recording for future coders. Finally, a complete large-scale cross-category review was undertaken to identify and correct remaining errors and to input and re-check weightings.

In providing a wider collection of peace agreements and more detailed coding ontology, PA-X provides for fuller interrogation of the effects of public commitments in peace processes. For example, Mattes & Savun (2009) test the effects of fear-reducing and cost-increasing provisions in peace settlements using a supplemented version of PA_D, finding that 48 comprehensive agreements and ceasefires from 1945 to 2004 fit their criteria. For the overlapping period and in the same conflicts, PA-X includes 168 ceasefires and 37 comprehensive agreements. Similarly, Ottmann & Vüllers (2015) test the power-sharing promises in peace agreements against the power-sharing events that followed, using PA_D to find that power-sharing appeared in 41 countries between 1989 and 2006, across the body of 189 agreements. PA-X provides 1,093 documents in 49 countries for this time period, finding 243 containing power-sharing provisions (102 in the UCDP armed conflicts), as shown in Figure 5.

Descriptive statistics and qualitative insights, 1990–2016

Peacemaking patterns

PA-X can be used to explore simple trends in peacemaking over the post-Cold War period. The geographical spread of peace agreements over the 25-year period is fairly even, as illustrated by Figure 6.

We see no discernible trend in the data with regard to the kind of agreement that is common over the period (Figure 7) (the 2005 aberration relates to the Sudan

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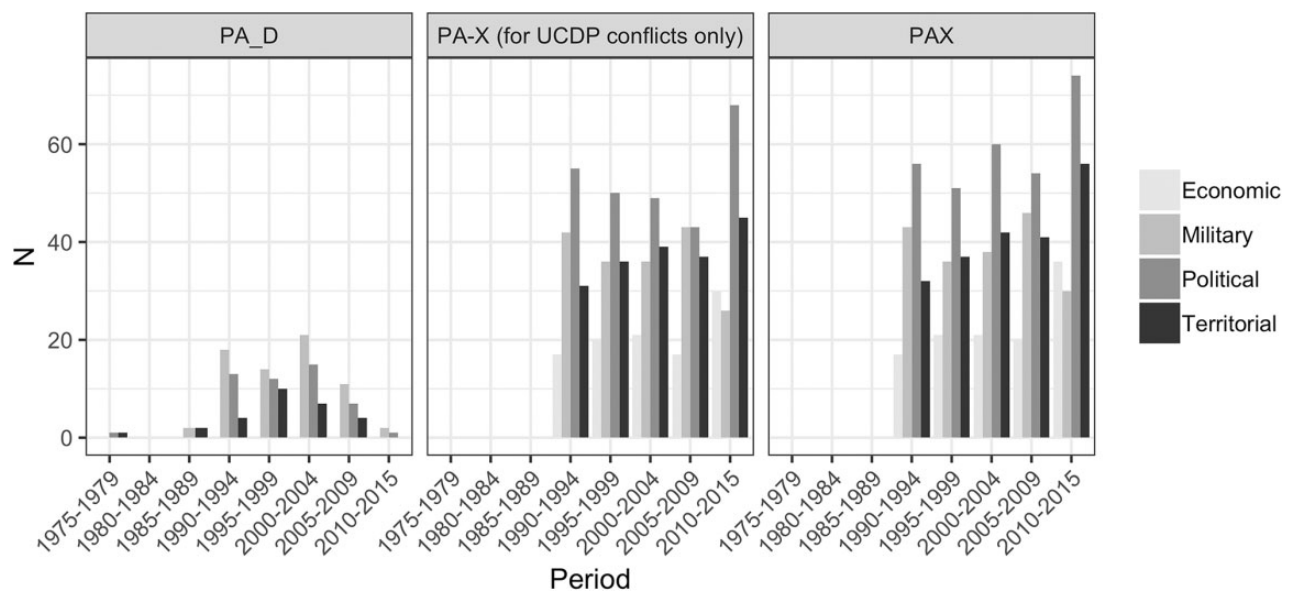[7] See PA-X codebook for details on coding of main power-sharing categories.

Figure 5. Power-sharing agreements across datasets

conflict driving the production of numerous substantive agreements).

PA-X shows a similar correlation between conflict and peace process to PA_D, despite the different peace agreement definitions and collections (Figure 8). However, when we use PA-X's peace process classification to move from agreement-level analysis to process-level analysis, while the number of peace agreements does not significantly drop over time, there is evidence that more agreements are being produced per conflict. The peak production of agreements happens in the mid-2010s, the number of agreements per conflict growing sharply following 2005.

New qualitative understandings of peace processes
PA-X offers a unique capacity for qualitative peace process comparison, pointing to three distinct peace process approaches to inclusion, which interestingly cut across conflict types. The first approach involves peace processes that aim to bring conflict protagonists and/or the populations they claim to represent into a revised, more inclusive political settlement. Comprehensive agreement to this end can be forged: through incremental issue-by-issue agreements that feed into a 'final' agreement (Sudan's CPA, 2005); through a 'big-bang' peace agreement which tries to establish a ceasefire and new political framework in one go (Bosnia's DPA, 1995); through agreed constitutional frameworks (South Africa's Interim Constitution, 1993); or through combinations of

agreements where no one agreement is easily classified as 'final' or 'comprehensive' (Sun City Agreement and Draft Constitution of the Transition, Democratic Republic of Congo, 2003).

A second set of peace processes establishes time-limited interim transitional arrangements, usually involving a power-sharing government inclusive of the main political-military leaders, aiming to re-institute democracy in place of state institutional failure. During transition, electoral, and/or constitutional reform, and sometimes transitional justice, processes are put in place to pave the way to new elections and a new constitution. This trajectory characterizes attempts to deal with institutional failure to prevent electoral or coup-related violence (Zimbabwe, Kenya), armed internal conflict (Sierra Leone, Liberia, South Sudan), or consequent to international conflict (Afghanistan, Iraq).

A third set of peace processes involve group accommodation between a majoritarian state and an ethno-national-indigenous group at the periphery focused on achieving secession or autonomy. Here, peace agreements attempt to revise the relationship between the centre and the periphery and provide a new political settlement at the level of the periphery. While the focus is on group accommodation through territorial division, the agreement may also provide for power-sharing at the level of the central state and/or at the substate level between the majority and minority communities (see Northern Ireland, Sri Lanka, Bangladesh).
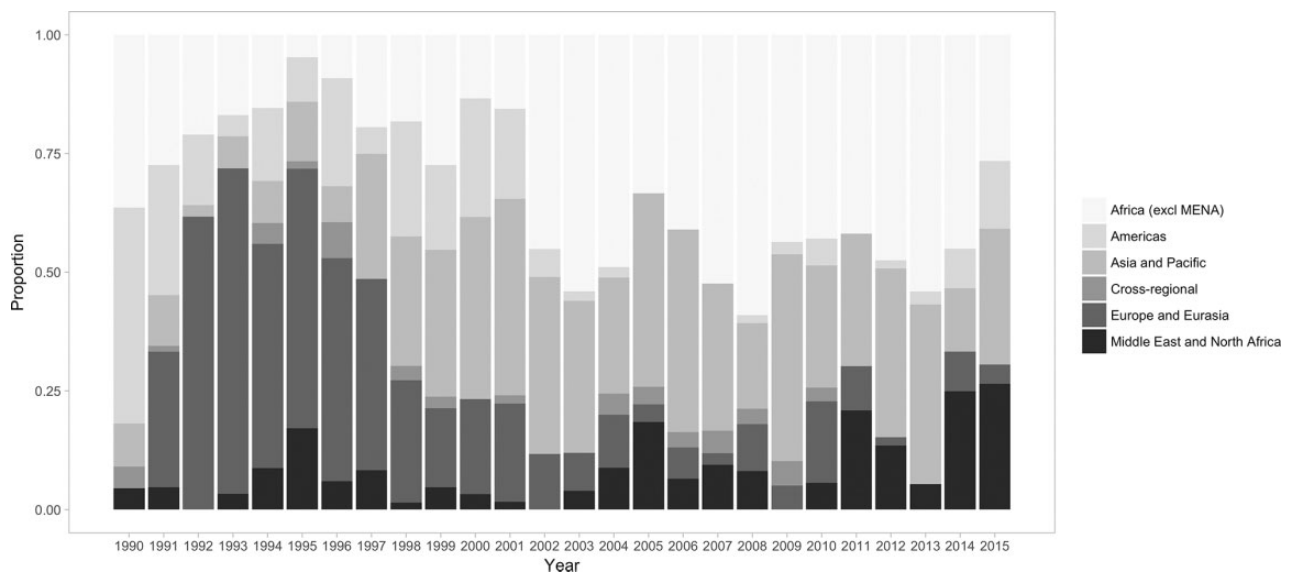
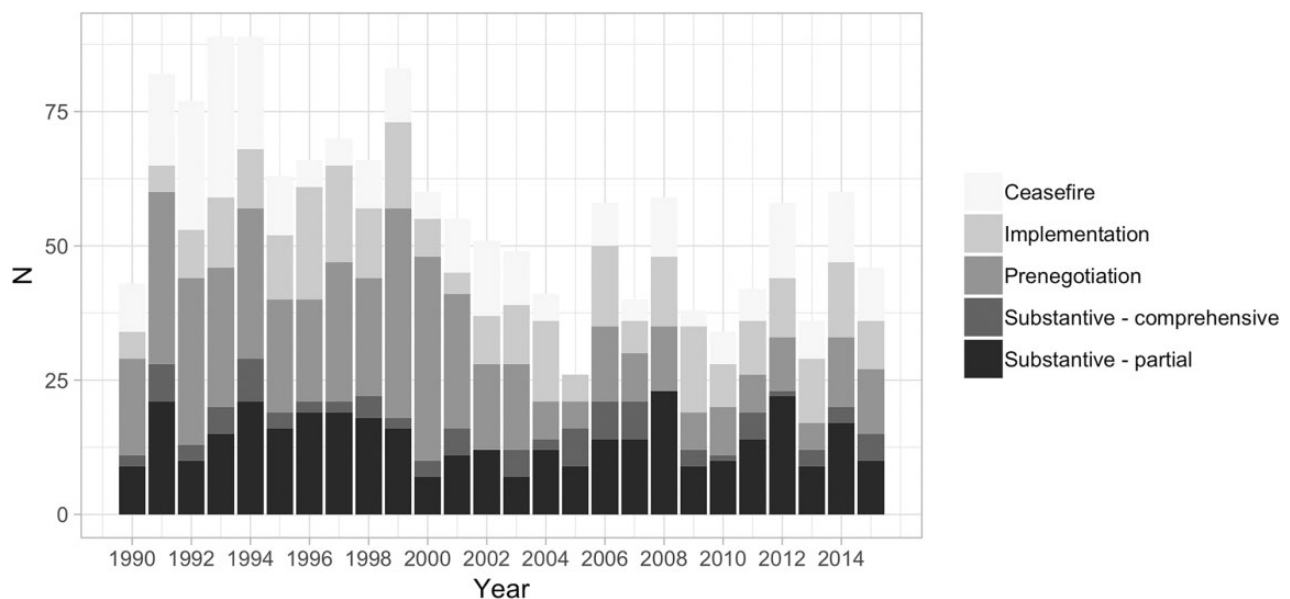Figure 6. PA-X agreements by region, 1990–2015

Figure 7. PA-X agreements by stage, over time

Treatment of issues over time

PA-X enables examination of temporal changes in peace agreement practice. Provision for women and sexual violence, for example, shows a marked increase over time (Figure 9), but gender is addressed at some stages more than others (Figure 10). Amnesty provisions decrease over time, but other transitional justice provisions rise (Figure 11). Apparently 'newer' issues such as organized crime, corruption and drugs (Figure 12) show some historic treatment: but organized crime provisions show a

recent marked rise. Similarly, Figure 13 shows reference to land reform rights, cultural heritage and pastoral/nomadism rights, indicating increased attention to pastoral/nomadic rights.

Temporal examination permits exploration of the relationship of agreement provision to international legal norms. For example, in Figure 11, we mark the key year when international actors consolidated a new prohibition on the use of amnesty through the International Criminal Court, the UN Secretary-General's (non-
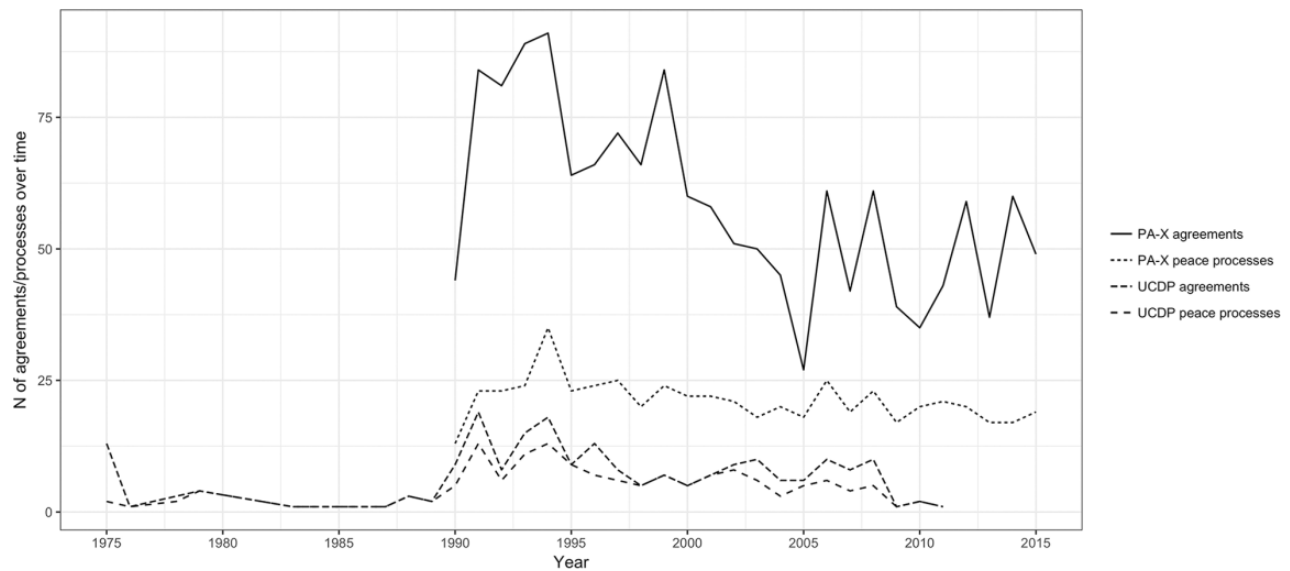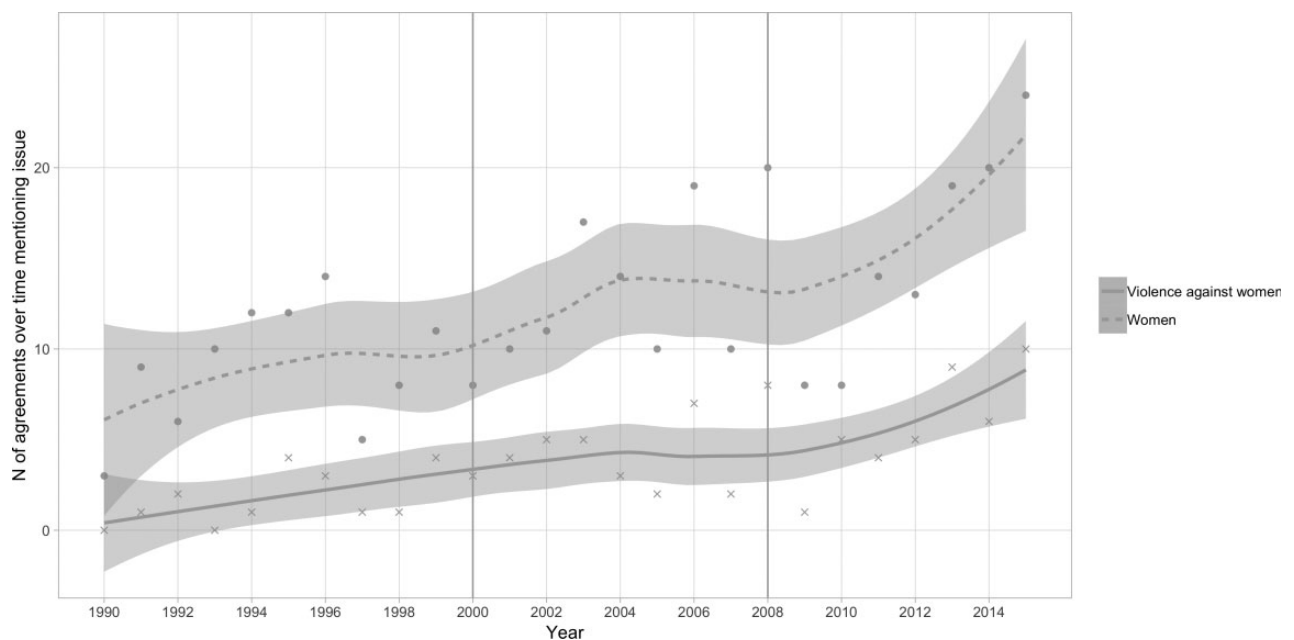
Figure 8. Dataset comparisons

Figure 9. PA-X women and sexual violence provisions

public) Guidelines to UN mediators insisting that they not sign blanket amnesties, and the publicity given to the UN's resultant caveat to the Lomé Accord in Sierra Leone (2000). This figure also indicates the capacity to compare how different transitional justice provisions interrelate and explore how they relate to each other (cf. Binningsbø et al., 2012). In Figure 9 (references to women) we mark the introduction of UN Security Council Resolution 1325 (2000), which for the first

time called for a 'gender perspective' to be adopted in peace agreements, and subsequent follow-up resolutions on sexual violence (in 2008).

Applications of the new dataset

To demonstrate the potential of PA-X in quantitative research, we revisit data which classify conflicts as terminating in victory, peace agreement, ceasefire, or other
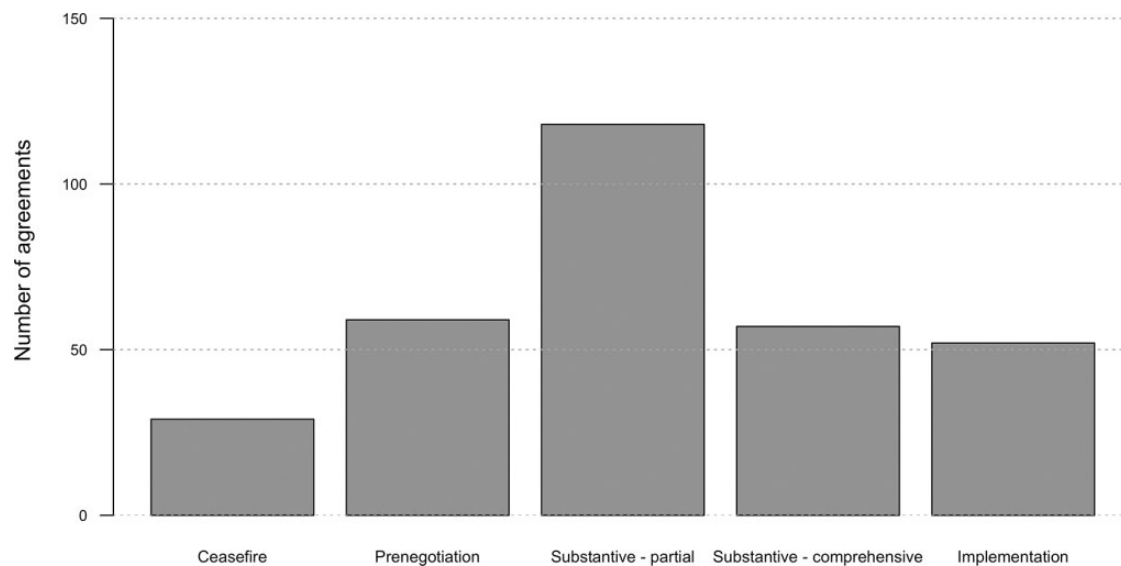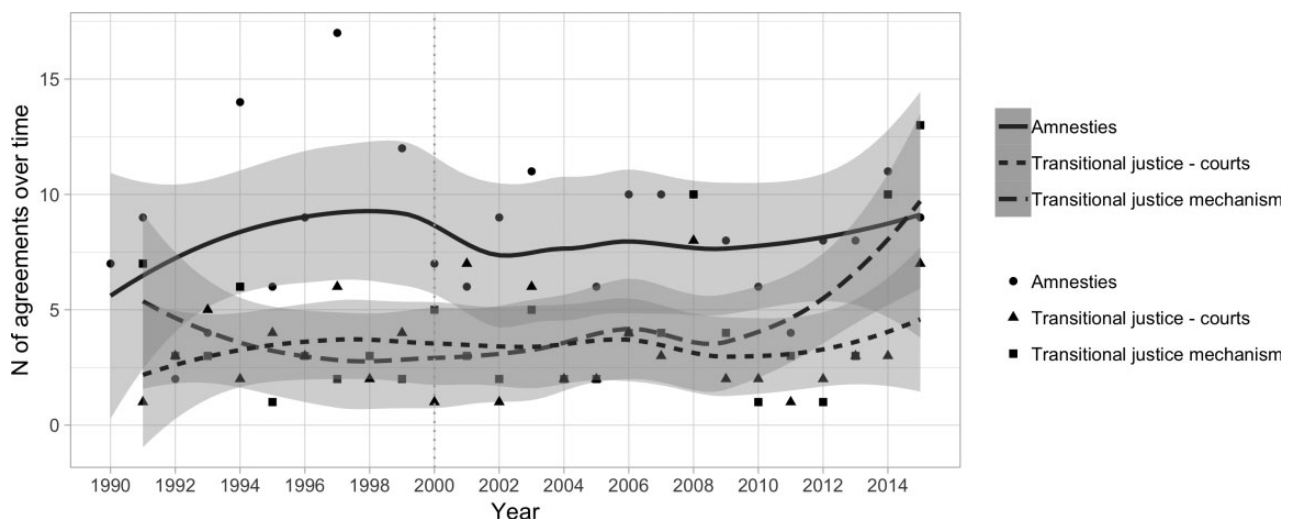
Figure 10. PA-X gender provisions by stage

Figure 11. PA-X amnesty and transitional justice provisions

(the last comprising the plurality of conflicts) (Kreutz, 2010).[8] Kreutz tests the significant factors in conflict recurrence, replicating earlier studies. He finds that the manner of conflict episode termination matters for conflict recurrence: victory or government victory decreases the probability of recurrence.

PA-X data enable us to replicate his findings and assess the relevance of peace process complexity to recurrence, while controlling for the manner in which the conflict ended. We used four variables relating to peace negotiation histories, which address the complexity of the conflict and peace process,[9] namely the numbers of: previous ceasefires; all previous agreements; previous

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[8] We present the following applications more fully in the Online appendix.

[9] This required us to limit the analysis to conflict episodes that started in 1990 or later, reducing the size of the dataset.
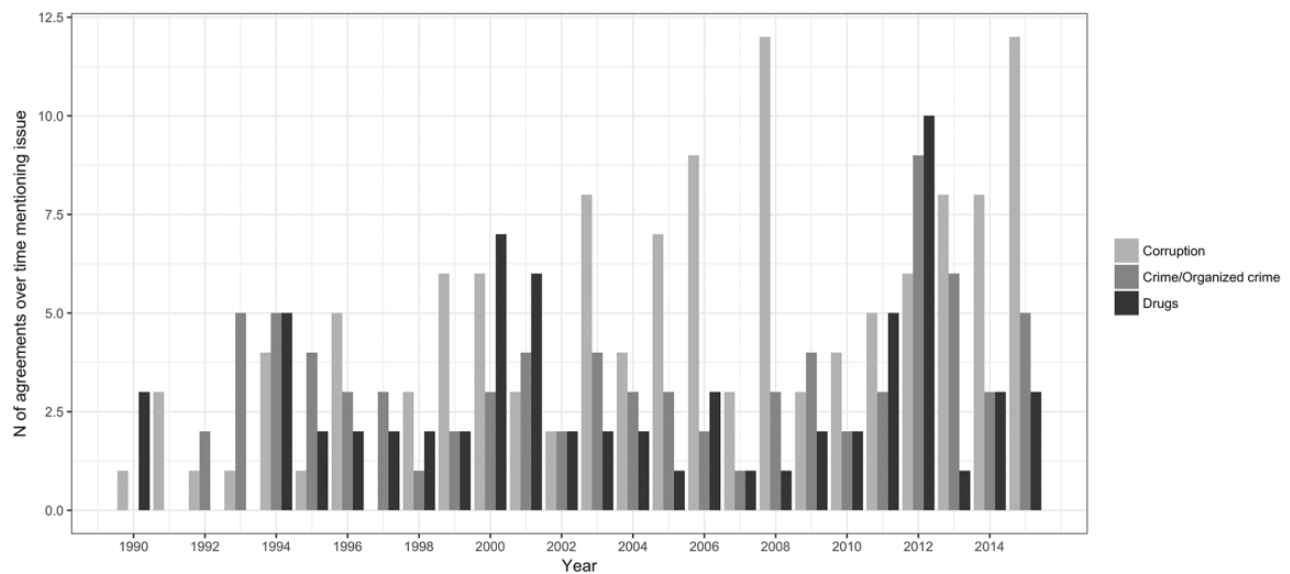
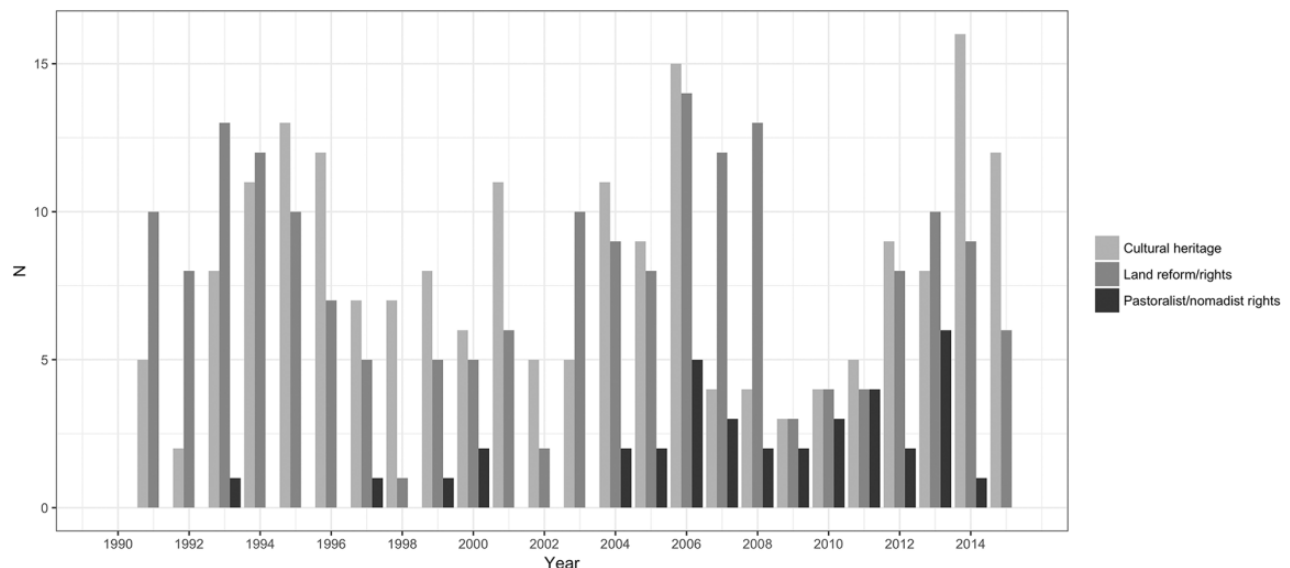Figure 12. PA-X Organized crime-related provisions

Figure 13. PA-X Environment, land reform, nomadic pastoralism provisions

agreements which include any type of power-sharing provisions; and previous agreements that dealt with territorial power-sharing (cf. Cederman et al., 2015).

Our results both confirm and refine Kreutz's findings. We confirm that even when negotiation history is accounted for, any side's victory decreases the likelihood of conflict recurrence. We also find, however, that an intricate history of power-sharing agreements decreases the likelihood of recurrence across Kreutz's categories, but only when controlling for the presence of agreements with territorial power-sharing provisions.

PA-X can also be used to consider the impact of particular peace agreement provisions on post-conflict outcomes. To illustrate, we consider the issue of post-conflict election quality, and specifically whether peace processes which heavily emphasize the importance of elections improve the treatment of opposition (once the process is successful enough for elections to be held). PA-X was used to ascertain the number of agreements signed in the conflict, from 1990 to the election year and the number of agreements signed in the election year, and to disaggregate the number of prior agreements with

elections-related provisions generally and those with specific provision for electoral commissions. We relied on the National Elections across Democracy and Autocracy Dataset (NELDA) to ascertain treatment of the opposition during elections (Hyde & Marinov, 2012).

We find that the countries which have experienced more frequent stated commitments to holding elections as part of the peace agreements were less likely to exhibit harassment of opposition and less likely to conduct elections in which opposition leaders were prevented from running, suggesting that repeated commitments to elections in peace agreements may result in better quality of elections.

Conclusion

While these applications illustrate its quantitative potential, PA-X aims to be more than a dataset of peace agreements. It is a multifaceted peace agreement access tool, allowing researchers and practitioners alike to access the agreement texts, create collections of texts or quantitative datasets of agreement content based on their own approaches, or customize quantitative data relating to peace agreement trajectories and content. It provides a basis for considering peace processes and agreements on their own terms. PA-X provokes inquiry into the types of violence and issues we understand peace processes and agreements to respond to, opening new possibilities for qualitative, quantitative and mixed-methods research.

Replication data

The dataset, codebook, and code for the empirical analysis in this article, as well as the Online appendix, can be found at http://www.prio.org/jpr/datasets and http://www.peaceagreements.org. The analyses were conducted in Stata and R.

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